



Digital Cameras

As prices continue to fall and standards keep improving, there's never been a better time to buy a digital camera. We test 12 models that promise high image quality and performance for under £250

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If you're thinking of buying your first digital camera, what has taken you so long? Perhaps you feel digital cameras still can't match the quality and value of 35mm film cameras. There is some truth in this argument, but, unless you're considering an expensive SLR model or have only £50 to spend, the flexibility, low running costs and fun to be had from digital cameras are simply too good to pass up.

And for those who have been reaping the benefits of digital for some time, now is an excellent time to consider an upgrade. A budget of just £200 can buy an 8-megapixel camera with fantastic image quality, high-resolution video capture, a massive LCD screen and a

lithium-ion battery, all wrapped up in a compact and sturdy aluminium body.

SNAP IT UP

Even we were surprised at the number of highly capable cameras that turned up within our budget of £180 to £250. In our last Labs test of digital cameras (*Shopper* August 2005) we found a few excellent performers for around the same price, but none managed to combine high image quality with fast performance and a high degree of manual control. This month we were spoilt for choice. So if you're looking for a digital camera, read on. We'll help you find a camera that fits your photography style and pocket.



CHOOSING A... DIGITAL CAMERA

You've decided to get a digital camera, but do you opt for one with lots of manual controls or one that does all the hard work for you? We can help with those important buying decisions

The definition of a good digital camera is one that takes great pictures. This may sound obvious, but what might be less obvious is that this is not just a matter of image quality. A camera that's quick to switch on, auto-focus, take a picture and be ready for the next one will produce far better results than one that spends ages chugging away, or leaves you grappling with awkward controls while your subject's smile withers to an exasperated wince.

A decent set of options and manual controls can improve picture quality, too. It's handy to be able to point, shoot and get a superb photo, but sometimes cameras need a little help. If photography is your hobby, manual controls allow you to experiment, producing interesting lighting or depth of field effects that add an extra layer of creativity to your pictures.

SCREEN IDOLS

To take great pictures, you need to be able to see what you're shooting. Liquid crystal display (LCD) screens are the norm in all but the cheapest digital cameras, but these vary from postage stamp size to the large screens more commonly found on video cameras. Optical viewfinders are increasingly rare, which is a shame, as they invariably reveal more detail than an LCD screen. However, screens have their advantages. They help with exposure settings by showing how the picture is likely to come out before it has been taken. Not all screens respond in this way, though, and sometimes they are slow to update, which makes composing shots harder.

Great pictures are only possible if your camera is actually with you. Get one that's too bulky, and you won't bother to take it anywhere. Having said that, a tiny camera is of little use if its equally tiny battery runs out after a few shots.

A camera's basic image quality is important too, of course. But bear in mind that there are many facets to this: most cameras can take superb photos, but few are consistently excellent, especially in low or uneven lighting conditions.

SPECS SAVERS

If your current digital camera is a couple of years old, the idea of eight megapixels can seem pretty exciting. However, specifications such as these should be treated with caution. A high-resolution charge-coupled device (CCD) needs a high-quality lens and auto-focusing system to create a picture sharp enough to take advantage of all those pixels. Lens quality is something the specifications won't reveal. Zoom range can also help or hinder the ability to capture detail; if you can't zoom in enough for your composition to fill the frame, you will squander pixels on things you don't want to shoot.

Image detail can be compromised by camera shake so, unless you're using a tripod, you'll want to capture images using fast shutter speeds. This isn't always possible, though. In low light when the flash is undesirable, or when the subject is too far away to be illuminated by the flash, the shutter needs to stay open longer to capture sufficient light. One workaround for this is to increase the ISO speed. A greater ISO range allows you to create brighter



▲ All the cameras connect to PCs via USB, but connecting and charging the Konica Minolta X1 (pictured) or the Canon Ixus i zoom is a little neater thanks to their docking cradles

pictures in low light, but using high ISO settings can introduce graininess. Alternatively, the Panasonic and Konica Minolta cameras have an image-stabilising mechanism. This allows you to use slower shutter speeds without introducing blur.

Colour accuracy is even harder to determine by specifications alone. Aperture and shutter speed ranges, white balance presets and metering modes play their part, but in practice they can't guarantee accurate colours. However, they can offer a way to improve shots when the camera's automatic settings are struggling.

ESSENTIAL EXTRAS

If your budget is fixed, don't forget the camera isn't the only expense you're likely to face. Three of the cameras on test come with AA alkaline batteries, so NiMH rechargeables and a charger are essential, and will set you back around £15. All the cameras come with a pathetically small amount of memory to store shots; photos typically consume 2MB per shot at maximum quality. SD cards with a 512MB capacity cost from around £20, with 512MB xD and Memory Stick formats costing from £35.

Finally, do get a case for your precious investment, even if it's only a thin fabric one to protect against scratches. Of the 12 cameras on test, only Centon includes a box for its camera.

LOOKING GOOD

The one thing we've neglected to mention so far is style. We enjoy a gorgeous-looking digital camera as much as anyone else. However, for us, good looks are not as important as the ability to take good pictures. If you disagree, you should use your own fashion judgement to pick out your ideal photographic partner.



▲ An LCD screen and an optical viewfinder each have their merits; ideally a camera will include both



REVIEW DIGITAL CAMERA

CANON
Ixus i zoom

RATING ★★

PRICE £223 inc VAT

SUPPLIER www.savastore.comDETAILS www.canon.co.uk

If Prada were to design a digital camera it would probably look like this. It is incredibly compact and even more stylish. If purple doesn't match your wardrobe you can also choose from black, violet, sahara and cranberry. The Ixus i design has been around for a couple of years now, but this is the first time that Canon has managed to incorporate a zoom into its tiny dimensions.

Images taken using Auto mode are usually respectable, and the minimal controls and quick response to button presses keep things simple. The Function button can be set to turn into a second shutter button automatically when the camera is held in Portrait mode, making single-handed operation easier. The lithium battery has a relatively low capacity, but the smaller screen helps give a decent battery life.

Switching to Manual mode provides access to various white balance presets, exposure compensation, ISO speeds and metering modes. However, these weren't enough to help the camera in trickier lighting conditions. Flash shots were gloomy, while low-light shots without the flash looked dark on the camera's screen and almost completely black on the PC. The Macro mode failed to focus any closer than 20cm in our tests, and fine detail in complex textures looked smudged.

This is a beautiful camera, but you'd have to love it very much indeed to forgive its weaknesses.

✓ Amazingly small; highly responsive

✗ Disappointing image quality

SPECIFICATIONS 2,592x1,944 optical resolution, 2.4x optical zoom, 16MB SD card. Part code 0354B004AA

REVIEW DIGITAL CAMERA

CENTON
DC8s

RATING ★★★★★

PRICE £200 inc VAT

DETAILS www.jessops.com

Jessops has stuffed an awful lot into its own-brand camera while keeping the price amazingly low. Inside its slim aluminium body is an 8-megapixel CCD, a 2½" LCD screen as well as an optical viewfinder, a lithium battery, lots of manual controls, an uncompressed TIFF capture mode and VGA-resolution video capture. You even get a reasonably substantial 64MB SD card and a soft case.

It almost seemed too good to be true, so we were delighted to find that the camera's image quality was up to scratch. The Centon DC8s performed well above average and produced the best result in the group when capturing detail in a shot of dense foliage. The maximum exposure time of half a second was a slight problem in very low light, but the DC8s still managed to capture a well-exposed image, though it contained quite a lot of noise.

Operation is straightforward, but the DC8s is not as responsive as some. It takes four seconds to shoot from power-up, or eight seconds when the flash is needed, and around three seconds between shots. The auto-focus takes around one second. We also found that one of the buttons was too small and low profile to press easily, and we kept accidentally rotating pictures rather than skipping to the next one during playback.

Still, we'd happily forgive these issues considering the quality and features that the camera offers for such a low price.

✓ Superb image quality; exhaustive manual control; aggressively priced

✗ Fiddly buttons; a bit sluggish

SPECIFICATIONS 3,264x2,448 optical resolution, 3x optical zoom, 64MB SD card. Part code CENDC8S

REVIEW DIGITAL CAMERA

CANON
PowerShot A610

RATING ★★★★★

PRICE £196 inc VAT

SUPPLIER www.savastore.comDETAILS www.canon.co.uk

The PowerShot A610 couldn't be more unlike its stable mate, the Ixus i zoom. It's the biggest, ugliest camera on test, but it takes the best photos, beating many pricier, higher-specified models for overall image quality. It coped flawlessly with tricky lighting conditions such as high contrast and near darkness, and its macro function made objects just 2cm wide fill the picture. Unfortunately, the camera's 5-megapixel sensor didn't capture as much detail as certain more highly specified models in wide-angle shots, although the 4x zoom helped it catch up in our telephoto detail test.

Operation is seriously quick, and in Auto mode the PowerShot A610 is easy to use. A dial offers 12 other modes, and their cryptic icons and abbreviations are deciphered into English on the screen when you select them. Various scene modes such as Night Snapshot and Portrait are included. There is also shutter- and aperture-priority plus full manual control, with settings reflected in the screen's brightness. Manual focus is available, assisted by a zoomed area of the screen for fine-tuning.

Once you have budgeted for rechargeable batteries, the PowerShot A610 costs nearly as much as the Sony DSC-W7, which we have reviewed on page 187. However, the Canon's extended zoom range is just as valuable as Sony's extra pixels and its superior Video mode is impressive, making this camera our top choice.

✓ Fantastic image quality; user-friendly controls; responsive

✗ Frumpy, bulky design

SPECIFICATIONS 2,592x1,944 optical resolution, 4x optical zoom, 32MB SD card. Part code 0322B007AA

REVIEW DIGITAL CAMERA

FUJIFILM
F10 Zoom

RATING ★★★★★

PRICE £217 inc VAT

SUPPLIER www.pcnextday.co.ukDETAILS www.fujifilm.co.uk

The F10 Zoom won our last digital camera Labs test (*Labs, Shopper* August 2005), so we were interested to see if it could repeat its success. Since then, its price has fallen by £17, which is enough to replace the pointless 16MB xD card with a 256MB version.

There's plenty to like about this camera. Its aluminium case is reasonably compact, but still includes a 2½" screen and a chunky lithium-ion battery that holds almost three times as much charge as those included with certain cameras. It is also quick to take photos, taking just three seconds from powering up and two seconds between shots.

Image quality in low light is the F10's greatest asset. Rather than always using its flash, the camera automatically switches to a high ISO speed, capturing a bright image with a fast exposure time to eliminate blur due to camera shake. The usual downside of this technique is excessive image noise, but this was rarely a problem with the F10. In our other tests, the images produced were high quality but bettered by those from the Canon A610, Centon and Sony cameras. Detail in shots was only average, and high-contrast subjects tended to come out a little too dark.

The F10 is still a great camera, but the three that outperform it for image quality also offer better manual control.

✓ Excellent image quality, especially in low light; great battery life

✗ Limited manual control

SPECIFICATIONS 2,848x2,136 optical resolution, 3x optical zoom, 16MB xD card. Part code N076590A



REVIEW DIGITAL CAMERA

KONICA
MINOLTA
Dimage X1

RATING ★★☆☆

PRICE £240 inc VAT

SUPPLIER www.mydv.co.ukDETAILS www.konicaminolta.co.uk

The Dimage X1 is a peculiar-looking camera. The front is almost featureless, and the lens remains flush with the 20mm-deep body of the camera at all times. Somehow, Konica Minolta has managed to fit a 3x optical zoom inside.

The button layout is a little unorthodox too, but shouldn't take too much getting used to. However, six seconds' wait between shots is too long, and the auto-focus sometimes spent three seconds ambling around its range before settling down and letting us take a shot. Nearly all settings are lost on power-down, which can be frustrating, and we found ourselves constantly having to switch off the flash after powering up. Onscreen previews tended to be jerky, especially in low light, and there's no optical viewfinder to rely on.

Image quality is variable. The lens can focus on subjects just 1cm away, which, combined with the 8-megapixel sensor and digital image stabilisation, produced stunning macro shots. However, the auto-focus was often way off in macro mode. Outdoor high-contrast shots looked gorgeous, but elsewhere the auto white balance often gave unrealistic colours, even in natural light. Fortunately, the various other white balance presets usually fixed the problem.

If form is just as important as function then the Dimage X1 is a decent choice, but it's just a bit too weird for our liking.

✓ Eye-catching design; highly detailed photos

✗ Variable image quality, sluggish auto-focus and screen previews

SPECIFICATIONS 3,264x2,448 optical resolution, 3x optical zoom, 32MB SD card. **Part code** 2801-332

REVIEW DIGITAL CAMERA

OLYMPUS
µ 600

RATING ★★☆☆

PRICE £190 inc VAT

SUPPLIER www.dabs.comDETAILS www.olympus.co.uk

If we were to be nice about the Olympus µ 600, we would call it reliable. On a bad day, though, we would call it boring. It's fairly compact and attractive, takes decent pictures with reasonable promptness and – like many cameras here – has a big LCD screen but no optical viewfinder. However, it failed to excel in any of our tests.

It has some unusual features, though. Like the rest of the µ range, it's weatherproof, which means it should survive a downpour but not a dunking. The camera is also extremely light. The 8MB internal memory is ridiculous for a 6-megapixel camera and xD upgrades cost more than SD, but at least the camera itself is reasonably affordable. Manual control is basic, with just exposure compensation, white balance presets, ISO speeds and two metering modes available. There's also a range of scene presets, but some are rather perplexing: Auction auto-brackets pictures at VGA resolution for uploading to eBay, apparently. However, the Reducing Blur mode does what it claims to do effectively enough.

The µ 600's best performance was indoors using ambient light, but only once we'd set the white balance to Tungsten. Elsewhere, colours were usually reasonably accurate but a little under-saturated and dull. But the camera's biggest flaw was a slight lack of detail compared to other cameras on test.

✓ Usually excellent colour accuracy; rainproof

✗ Relatively poor detail

SPECIFICATIONS 2,816x2,112 optical resolution, 3x optical zoom, xD slot (8MB internal). **Part code** 002763

REVIEW DIGITAL CAMERA

NIKON
CoolPix P2

RATING ★★★★★

PRICE £234 inc VAT

SUPPLIER www.pcwb.comDETAILS www.nikon.co.uk

The CoolPix P2 is packed with features. There are shutter- and aperture-priority modes for purists, plus a wide range of other controls and options including saturation, contrast, automatic exposure bracketing and white balance bracketing. There's even a mode that detects faces to focus on. Pictures stored in the memory can have their contrast automatically improved, which is perfect for fixing poorly exposed shots before sending them to a printer.

The best of the fun features is wireless networking. Ad hoc and Infrastructure networks, WEP and WPA encryption are supported, and photos can be transferred wirelessly to a PC or printer, on command or as soon as they're taken. But the camera becomes inoperable for the eight or so seconds it takes to transfer images. This makes the shoot-and-transfer mode less useful.

Ignore these features, and the CoolPix P2 is still a high-quality, well-priced camera. Image quality was always above average and often considerably so, with impeccable colour accuracy in natural light and bright exposures in very low light without flash. Detail was only average, though. It's reasonably quick and easy to use, but at times it's a little too fast: the zoom moves so quickly it can be tricky to set it precisely. Also, the battery only lasted for one hour.

There are better all-rounders here, but for discerning gadget freaks the CoolPix P2 is perfect.

✓ Superb colour accuracy; WiFi interface

✗ Poor battery life; hyperactive zoom action

SPECIFICATIONS 2,594x1,944 optical resolution, 3.5x optical zoom, SD slot (16MB internal). **Part code** VAA470B1

REVIEW DIGITAL CAMERA

PANASONIC
Lumix DMCLZ2BB

RATING ★★★★★

PRICE £200 inc VAT

SUPPLIER <http://shop.panasonic.co.uk>DETAILS www.panasonic.co.uk

What Panasonic lacks in naming skills it makes up for in lens specifications. The Lumix DMCLZ2BB (or LZ2 for short) has a 6x zoom range, which is likely to be far more use in practice than an 8-megapixel CCD for capturing detail. It also has optical image stabilisation, which dramatically improves sharpness at extreme telephoto settings or in low light.

In other respects the LZ2's specifications are ordinary, with a 5-megapixel CCD, 2" LCD screen, fairly basic manual control options and power provided by two AA batteries. The case is made from plastic rather than metal, but seems pretty sturdy. However, the camera is rather lethargic, taking four seconds to power up and shoot, and up to eight seconds between shots.

Image quality is extremely high in most conditions, and the LZ2 produced the best flash photos in the group. Outdoor shots were usually spot on, but a few were a little over-saturated. Indoor shots without the flash were variable; in one test it gave the best exposure of any camera here, but in another we were unable to eliminate a yellow cast despite changing the white balance mode.

When we first reviewed this camera six months ago, we liked it a lot. That hasn't changed, but though its price has fallen the competition has improved. However, for wildlife photography its zoom will make all the difference.

✓ Mostly excellent image quality; 6x zoom with image stabilisation

✗ Sometimes struggles in low light; long wait between shots

SPECIFICATIONS 2,560x1,920 optical resolution, 6x optical zoom, SD slot (14MB internal). **Part code** DMCLZ2BB



REVIEW DIGITAL CAMERA

PENTAX
S5z

RATING ★★★★★

PRICE £187 inc VAT

SUPPLIER www.dixons.co.ukDETAILS www.pentax.co.uk

It isn't the smallest on test, but the Pentax S5z is as petite as a camera can be while still including a 2½" screen. There isn't room for much else on the back panel, though. There's no optical viewfinder, and the buttons are small and bunched together, though they're not too fiddly. What's worse, some of the labelling was already beginning to wear off on our test specimen, so it probably won't be long before it disappears completely.

The S5z has the lowest price in this Labs test, so it's hardly surprising that its specifications are relatively basic. It has a 5-megapixel CCD, a 3x optical zoom and no manual priority modes. However, there are a few unusual features, including manual focus. When using this feature, the screen zooms into the centre of the image for reasonably informative visual feedback. Video is recorded in MPEG4 format, giving high-quality footage at just 20MB per minute, and the time-lapse modes are great fun. The camera is responsive, taking a top-resolution shot every two seconds, and it displays photos stored in its memory with startling swiftness.

Sadly, still image quality is less exciting. While the Macro mode is superb and the flash captured warm, natural skin tones, other pictures were slightly over-saturated and less sharp than those of most other cameras on test.

The S5z is a likeable camera, but in this company its image quality is below average.

✓ Very small; excellent video mode, straightforward controls

✗ Mediocre image quality

SPECIFICATIONS 2,560x1,960 optical resolution, 3x optical zoom, SD slot (9.3MB internal). **Part code** 18392

REVIEW DIGITAL CAMERA

SAMSUNG
Digimax V700

RATING ★★★★★

PRICE £188 inc VAT

SUPPLIER www.digiuk.comDETAILS www.samsungcamera.co.uk

The price of the Digimax V700 varies greatly, but by shopping around you can get it for well under £200, which isn't bad for a 7-megapixel camera. It's well specified in other areas, too, with the ability to save VGA-resolution video in MPEG4 format. This allows it to save high-quality movies in files roughly a quarter the size of motion JPEG footage.

The back and top of the camera are littered with controls for quick access to various functions, and aperture priority, shutter priority and manual exposure are available. Metering is displayed on the screen, and the image itself becomes darker or lighter to reflect manual settings, but only when the shutter is half-pressed. The camera is quick to start up, taking a picture within two seconds, but it takes up to six seconds between shots at the highest resolution, during which time the controls can't be adjusted in preparation for the next photo.

Image quality in many of our tests was excellent, producing some of the best pictures in natural light. In our garden shot, it captured natural colours and plenty of detail and exposed darker areas beautifully. However, high-contrast shots and flash photography came out a bit too dark.

The V700 is a superb camera, but it's not quite as good as the similar Sony DSC-W7 reviewed here.

✓ Mostly excellent image quality; comprehensive manual control

✗ Long gap between shots

SPECIFICATIONS 3,072x2,304 optical resolution, 3x optical zoom, SD slot (32MB supplied). **Part code** 8801089748577

REVIEW DIGITAL CAMERA

RICOH
Caplio GX8

RATING ★★★★★

PRICE £246 inc VAT

SUPPLIER www.pcbw.comDETAILS www.ricoh.co.uk

Ricoh's Caplio GX8 has the look and feel of an enthusiast's camera. There's an accessory shoe for an external flash and a wheel for quick access to the shutter speed and aperture in Manual exposure mode. These settings are instantly reflected in the screen brightness and with exposure metering. The 3x zoom lens is capable of wide-angle shots, but its telephoto setting is only equivalent to that of a typical 2x zoom lens. The camera is usually extremely quick, but its flash takes up to 10 seconds to charge up.

The Macro mode is astounding, focusing on objects that are practically touching the lens. Outdoor photography was mostly good, but portraits revealed the camera's limitations. Its Auto mode overexposed our outdoor skin tone test. Indoors without the flash, we had to switch the white balance to Tungsten to produce vaguely acceptable shots.

Flash photography produced some alarming results, completely bleaching out subjects at one metre, although at two metres the picture was well exposed. Surprisingly for an 8-megapixel model, the Caplio GX8 was one of the worst cameras here at capturing detail. This was partly because the wide-angle lens couldn't zoom in as much as others in our telephoto detail test, but also because it tended to misjudge exposure and bleach out the detail we were trying to capture in other tests.

✓ Superb manual control; highly responsive

✗ Unreliable image quality; disastrous flash

SPECIFICATIONS 3,264x2,448 optical resolution, 3x optical zoom, SD slot (26MB internal). **Part code** RCG8VAA470B1

REVIEW DIGITAL CAMERA

SONY
DSC-W7

RATING ★★★★★

PRICE £219 inc VAT

SUPPLIER www.savastore.comDETAILS www.sony.co.uk

The DSC-W7 may not be the smallest compact camera, but whether you want a friendly point-and-click snapper or something with which to get creative, it should perform well. Sadly, its Video mode dropped a few frames in our tests, resulting in stuttered playback. Other than this, our only complaint is that there is no Delete All function for pictures stored in the memory.

Images are captured at breakneck speed. It can power up and take a shot with the flash in under two seconds and another one a second later. The auto-focus usually takes less than half a second, but is slower for nearby subjects. There's an optical viewfinder, but the 2½" screen comes into its own when accessing the manual settings. Adjustment of shutter speed and aperture is immediately reflected in the brightness of the image and with exposure metering, and even flash setting is taken into account. There's no shutter or aperture priority, though – just automatic or fully manual.

Image quality was consistently excellent, capturing natural colours in all sorts of lighting conditions with more detail than any other camera on test. The DSC-W7 also excelled at flash photography, illuminating large scenes brightly and evenly. The video-recording problem is disappointing, but if video holds little interest for you then this is the camera to buy.

✓ Superb image quality; accessible manual control; highly responsive

✗ Dropped frames in video mode; no Delete All function

SPECIFICATIONS 3,072x2,304 optical resolution, 3x optical zoom, Memory Stick slot (32MB internal). **Part code** DSC-W7S



MANUFACTURER	CANON	CANON	CENTON	FUJIFILM	KONICA MINOLTA	NIKON	OLYMPUS	PANASONIC	PENTAX	RICOH	SAMSUNG	SONY
Model	IXUS i zoom	PowerShot A610	DC8s	F10 Zoom	Dimage X1	CoolPix P2	µ 600	Lumix DMCLZ2BB	S5z	Caplio GX8	Digimax V700	DSC-W7
Rating	★★	★★★★★	★★★★★	★★★★	★★★	★★★★	★★★	★★★★	★★★	★★	★★★★	★★★★★
Effective number of pixels	5.0 million	5.0 million	8.1 million	6.3 million	8.0 million	5.1 million	6.0 million	5.0 million	5.0 million	8.2 million	7.1 million	7.2 million
Maximum image resolution	2,592x1,944	2,592x1,944	3,264x2,448	2,848x2,136	3,264x2,448	2,594x1,944	2,816x2,112	2,560x1,920	2,560x1,960	3,264x2,448	3,072x2,304	3,072x2,304
Viewfinder	None	Optical	Optical	None	None	None	None	None	None	Optical	Optical	Optical
LCD screen size	1.8" (118,000 pixels)	2" (115,000 pixels)	2½" (115,000 pixels)	2½" (115,000 pixels)	2½" (118,000 pixels)	2½" (110,000 pixels)	2½" (115,000 pixels)	2" (85,000 pixels)	2½" (110,000 pixels)	1.8" (118,000 pixels)	2" (118,000 pixels)	2½" (115,000 pixels)
Optical zoom (35mm-equivalent focal length)	2.4x (38-90mm)	4x (35-140mm)	3x (36-108mm)	3x (36-108mm)	3x (37-111mm)	3.5x (36-126mm)	3x (35-105mm)	6x (37-222mm)	3x (36-107mm)	3x (28-85mm)	3x (38-114mm)	3x (38-114mm)
Digital zoom	4x	4x	5.1x	6.2x	4x	4x	5x	4x	4x	4x	10x	6x
Shutter speed	15-½/1,000 seconds	15-½/2,000 seconds	½-½/1,500 seconds	3-½/2,000 seconds	1-½/1,250 seconds	8-½/1,000 seconds	4-½/1,000 seconds	8-½/2,000 seconds	4-½/2,000 seconds	30-½/2,000 seconds	8-½/2,000 seconds	30-½/2,000 seconds
Aperture range	f/3.2-f/5.4	f/2.8-f/8.0	f/2.8-f/6.7	f/2.8-f/8.0	f/3.5-f/7.1	f/2.7-f/7.6	f/3.1-f/5.2	f/2.8-f/6.2	f/2.6-f/5.6	f/2.5-f/8.1	f/2.8-f/6.4	f/2.8-f/5.6
Closest macro focus	10cm	1cm	5cm	7.5cm	1cm	4cm	7cm	5cm	6cm	1cm	4cm	6cm
ISO range	50-400	50-400	50-200	80-1,600	50-200	64-400	64-800 (1,600 at 2 megapixels)	80-400	80-400	64-1,600	50-400	100-400
Maximum movie quality	640x480 at 30fps	640x480 at 30fps	640x480 at 30fps	640x480 at 30fps	640x480 at 20fps	640x480 at 30fps	640x480 at 15fps	320x240 at 30fps	640x480 at 30fps	320x240 at 30fps	640x480 at 25fps	640x480 at 25fps
File formats (still/movie)	JPEG/AVI (MJPEG)	JPEG/AVI (MJPEG)	JPEG, TIFF/AVI (MJPEG)	JPEG/AVI (MJPEG)	JPEG/QuickTime (MJPEG)	JPEG/QuickTime (MJPEG)	JPEG/QuickTime (MJPEG)	JPEG/QuickTime (MJPEG)	JPEG/AVI (MPEG4)	JPEG, TIFF/AVI (MJPEG)	JPEG, TIFF/AVI (MPEG4)	JPEG/MPEG1
Memory type (supplied)	SD (16MB)	SD (32MB)	SD (64MB)	xD (16MB)	SD (32MB)	SD (16MB internal)	xD (8MB internal)	SD (14MB internal)	SD (9.3MB internal)	SD/MMC (26MB internal)	SD (32MB)	Memory Stick (32MB internal)
Power	Li-ion, 760 mAh	4xAA (alkaline supplied)	Li-ion, 1,050mAh	Li-ion 1,950mAh	Li-ion 820mAh	Li-ion 730mAh	Li-ion 1,230mAh	2xAA (alkaline supplied)	Li-ion, 710mAh	2x AA (alkaline supplied)	Li-ion, 1,130mAh	2x AA (NiMH and charger supplied)
FEATURES												
Focus modes	Auto, Macro	Auto, Macro, Manual	Auto, Macro	Auto, Macro	Auto, Macro	Auto, Macro	Auto, Macro, Super-Macro	Auto, Macro	Auto, Macro, Super-macro, Manual	Auto, Macro, Manual	Auto, Macro, Manual	Auto, Macro, Manual
Auto-focus modes	Multi-region, Centre, Spot	Multi-region, Spot	Multi-region	Multi-region, Centre, Continuous	Multi-region, Spot	Multi-region, Centre, Manual, Continuous	Multi-region, Spot	Multi-region	Multi-region, Spot	Multi-region, Centre, Spot	Multi-region	Multi-region, Centre
Metering	Multi-region, Centre, Spot	Multi-region, Centre, Spot	Multi-region, Spot	Multi-region, Average, Spot	Multi-region, Spot	Multi-region, Centre, Spot, Spot AF	Multi-region, Spot	Multi-region	Multi-region, Centre, Spot	Multi-region, Centre, Spot	Multi-region, Spot	Multi-region, Spot
Flash modes	Auto, Red-eye reduction, On, Off, Slow Sync	Auto, Red-eye reduction, On, Off, Slow Sync	Auto, Red-eye reduction, On, Off, Slow Sync	Auto, Red-eye reduction, On, Off, Slow Sync	Auto, Red-eye reduction, On, Off, Slow Sync	Auto, Red-eye reduction, On, Off, Slow Sync	Auto, Red-eye reduction, On, Off, Slow Sync	Auto, Red-eye reduction, On, Off, Slow Sync	Auto, Red-eye reduction, On, Off, Slow Sync	Auto, Red-eye reduction, On, Off, Slow Sync	Auto, Red-eye reduction, On, Off, Slow Sync	Auto, Red-eye reduction, On, Off, Slow Sync
Priority modes	Auto	Auto, Shutter, Aperture, Manual	Auto, Shutter, Aperture, Manual	Auto	Auto	Auto, Shutter, Aperture	Auto	Auto	Auto	Auto, Aperture, Manual	Auto, Shutter, Aperture, Manual	Auto, Manual
Drive modes	Single, Continuous (1.8fps), Self-Timer (10s, 2s)	Single, Continuous (2.1ps), Self-Timer (10s, 2s)	Single, Continuous (Three shots at 1fps), Self-Timer (10s, 2s)	Single, Continuous (0.6fps), Self-Timer (10s, 2s)	Single, Continuous (Three shots at 0.5fps), Self-Timer (10s), Multi-frame	Single, Continuous (2.5fps), Self-Timer (10s, 3s)	Single, Continuous (10.2-megapixel shots at 2fps), Self-Timer (10s)	Single, Continuous (Three shots at 2fps), Self-Timer (10s, 2s)	Single, Continuous (0.6fps), Self-Timer (10s, 2s)	Single, Continuous (16 shots at 0.4fps), Self-Timer (10s, 2s)	Single, Continuous (Three shots at 0.4fps), Self-Timer (10s, 2s, 10+2s)	Single, Continuous (Five shots at 0.9fps), Self-Timer (10s)
Connectivity	USB Hi-Speed, AV	USB Hi-Speed, AV	USB, AV	USB Hi-Speed, AV	USB, AV	USB Hi-Speed, AV, 802.11b/g	USB, AV	USB, AV	USB, AV	USB Hi-Speed, AV	USB Hi-Speed, AV	USB Hi-Speed, AV
Output compatibility	PictBridge, PAL, NTSC	PictBridge, PAL, NTSC	PictBridge, PAL, NTSC	PictBridge, PAL, NTSC	PictBridge, PAL, NTSC	PictBridge, PAL, NTSC	PictBridge, PAL, NTSC	PictBridge, PAL, NTSC	PictBridge, PAL, NTSC	PictBridge, PAL, NTSC	PictBridge, PAL, NTSC	PictBridge, PAL, NTSC
Weight	105g	235g	150g	155g	135g	170g	129g	178g	105g	205g	150g	197g
Dimensions (HxWxD)	45x97x24mm	66x105x49mm	57x91x27mm	58x92x28mm	68x95x20mm	60x91x39mm	55x97x27mm	64x101x33mm	55x83x22mm	58x114x29mm	57x105x30mm	60x91x37mm
Extras	Cradle, charger, remote control, USB and AV cables	USB and AV cables	Charger, USB and AV cables, soft case	Charger, USB and AV cables	Cradle, charger, USB and AV cables	Charger, USB and AV cables	Charger, USB and AV cables	USB and AV cables	Charger, USB and AV cables	USB and AV cables	Charger, USB and AV cables	Charger, USB and AV cables
BUYING INFORMATION												
Warranty	One year	One year	One year	One year	One year	One year	One year	One year	One year	One year	One year	One year
Price inc VAT	£223	£196	£200	£217	£240	£234	£190	£200	£187	£246	£188	£219
Supplier	www.savastore.com	www.savastore.com	www.jessops.com	www.pcnextday.co.uk	www.mydv.co.uk	www.pcwb.com	www.dabs.com	shop.panasonic.co.uk	www.dixons.co.uk	www.pcwb.com	www.digiuk.com	www.savastore.com
Details	www.canon.co.uk	www.canon.co.uk	www.jessops.com	www.fujifilm.co.uk	www.konica-minolta.co.uk	www.nikon.co.uk	www.olympus.co.uk	www.panasonic.co.uk	www.pentax.co.uk	www.ricoh.co.uk	www.samsung-camera.co.uk	www.sony.co.uk
Part code	03548004AA	0322B007AA	CENDC8S	N076590A	2801-332	VAA470B1	002763	DMCLZ2BB	18392	RCGX8	8801089748577	DSC-W7S

LABS VERDICT DIGITAL CAMERAS

This month's Labs test shows that £250 is enough to buy a small designer camera or a camera that produces great images, but not both. The pictures produced by Canon's Ixus i zoom, Pentax's S5z and Konica Minolta's X1 were often excellent, but in tricky lighting conditions they trailed behind the best cameras in the group.

Panasonic's LZ2 looks boring, but high image quality and a 6x zoom with image stabilisation mean its pictures are anything but. The extended zoom range isn't so useful for holidays or family portraits, but for wildlife or sports photography it will make a big difference. The only downside is the

six-second wait between shots, which is no good when trying to capture an unpredictable subject.

The three cameras that stood out most are all similar: they are fairly plain-looking but they have excellent manual control and exceptionally high image quality. Centon's DC8s very nearly walked away with our Best Buy award, thanks to its superb specifications, immaculate image quality and incredibly low price. However, we like cameras to be really responsive, and the DC8s is only average in this respect.

Canon's PowerShot A610 and Sony's DSC-W7 have that fast response, and their image quality is

even better. Choosing between them wasn't easy, but the Sony DSC-W7 has a flawed Video mode. The A610 is the best all-rounder here, so it wins our Best Buy award. **CS**

CANON
PowerShot
A610

